|  | Α  | В  | С                             | D  | E  | F   | G   | Н  |  | J  | K  | L  |  |  |  |
|--|--|--|-------------------------------|--|--|---|---|--|--|--|--|--|--|--|--|
| 1  |  | •  | •                             | Backgrou   | und Statistic  | cs for Data   | Sets with   | Non-Dete   | cts  | •  |  |  |  |  |  |
| 2  | Us   | User Selected Options  |                               |  |  |   |   |  |  |  |  |  |  |  |  |
| 3  | Date/T   | ime of Cor   | nputation                     | 7/30/2013 12:32:44 PM  |  |   |   |  |  |  |  |  |  |  |  |
| 4  |  |  | From File                     | WorkSheet.xls  |  |   |   |  |  |  |  |  |  |  |  |
| 5  |  | Full   | Precision                     | OFF .  |  |   |   |  |  |  |  |  |  |  |  |
| 6  | Cor  | nfidence C   |                               | 95%  |  |   |   |  |  |  |  |  |  |  |  |
| 7  | 00.  |  | Coverage                      | 95%  |  |   |   |  |  |  |  |  |  |  |  |
|  | rent or Fut  |  | ū                             | 1  |  |   |   |  |  |  |  |  |  |  |  |
| 8  | mber of Bo   |  |                               | 2000   |  |   |   |  |  |  |  |  |  |  |  |
| 9  | ilibei oi bi   | ooisiiap O   | perations                     | 2000   |  |   |   |  |  |  |  |  |  |  |  |
| 10   | DDx  | ND.  |                               |  |  |   |   |  |  |  |  |  |  |  |  |
| 11   | DUX  |  |                               |  |  |   |   |  |  |  |  |  |  |  |  |
| 12   |  |  |                               |  |  |   |   |  |  |  |  |  |  |  |  |
| 13   |  | General Statistics  Total Number of Observations 65 Number of Missing Observations 0 |                               |  |  |   |   |  |  |  |  | 0  |  |  |  |
| 14   |  |  |                               |  |  | 65 Number of Missing Observations   |   |  |  |  |  |  |  |  |  |
| 15   |  |  | Number of                     |  | bservations  |   |   |  |  |  |  |  |  |  |  |
| 16   |  |  |                               |  | r of Detects   |   |   | Number of Non-Detects  |  |  |  |  |  |  |  |
| 17   |  |  | Numi                          |  | nct Detects  |   |   | Number of Distinct Non-Detects   |  |  |  |  |  |  |  |
| 18   |  |  |                               |  | num Detect   | -   |   | Minimum Non-Detect   |  |  |  |  |  |  |  |
| 19   |  |  |                               |  | num Detect   | -   |   | Maximum Non-Detect   |  |  |  |  |  |  |  |
| 20   |  |  |                               |  | ce Detected  | _   |   | Percent Non-Detects  |  |  |  |  |  |  |  |
| 21   |  |  |                               |  | an Detected  |   |   |  |  | SD<br>f Detected Log   | Detected   | 0.837  |  |  |  |
| 22   |  |  | Mean of D                     | Detected Lo  | ogged Data   | 0.46  |   | 0.654  |  |  |  |  |  |  |  |
| 23   |  |  |                               |  |  |   |   |  |  |  |  |  |  |  |  |
| 24   |  |  |                               | Critica  | ıl Values fo   | r Backgrou  | nd Thresh   | old Value  | s (BTVs)   |  |  |  |  |  |  |
| 25   |  |  | Tolerand                      | ce Factor k  | K (For UTL)  | 2   |   |  |  | d2max  | (for USL)  | 3.057  |  |  |  |
| 26   |  |  |                               |  |  |   |   |  |  |  |  |  |  |  |  |
| 27   |  |  |                               |  | Norma  | I GOF Tes   | t on Dete   | cts Only   |  |  |  |  |  |  |  |
| 28   |  |  | Shap                          | oiro Wilk T  | est Statistic  | 0.956   |   |  | Shapiro V  | Wilk GOF Tes   | st   |  |  |  |  |
| 29   |  |  | 5% Shap                       | iro Wilk Cı  | ritical Value  | 0.945   | Detected Data appear Normal at 5% Significance Level  |  |  |  |  |  |  |  |  |
| 30   |  |  |                               | Lilliefors To  | est Statistic  | 0.106   |   |  | Lilliefor  | rs GOF Test  |  |  |  |  |  |
| 31   |  |  | 5% l                          | Lilliefors Cı  | ritical Value  | 0.132   |   |  |  |  |  |  |  |  |  |
| 31   | Detected Data appear Normal at 5% Significance Level |  |                               |  |  |   |   |  |  |  |  |  |  |  |  |
| 32   |  |  |                               | Detec  | ted Data a   | ppear Norn  | nal at 5%   | Significan   | ce Level   |  |  |  |  |  |  |
| 32   |  |  |                               | Detec  | ted Data a   | ppear Norn  | nal at 5%   | Significan   | ce Level   |  |  |  |  |  |  |
|  |  |  | Кар                           |  | ted Data a<br>(KM) Backç   | · -   |   |  |  | ribution   |  |  |  |  |  |
| 32<br>33<br>34   |  |  | Кар                           |  |  | ground Sta  |   |  |  | ribution   | SD   | 0.949  |  |  |  |
| 32<br>33   |  |  |                               | lan Meier  | (KM) Backç   | ground Sta<br>1.431   |   |  |  |  | SD<br>(M UPL (t)   | 0.949  |  |  |  |
| 32<br>33<br>34<br>35<br>36   |  |  | 95                            | lan Meier<br>% UTL95%  | (KM) Backç<br>Mean   | 1.431<br>3.329  |   |  |  |  | (M UPL (t)   |  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37   |  |  | 95 <sup>-</sup>               | lan Meier<br>% UTL95%  | (KM) Backç<br>Mean<br>6 Coverage   | ground Sta<br>1.431<br>3.329<br>2.647   |   |  |  | 95% K<br>95% KM Per  | (M UPL (t)   | 3.027  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38   |  |  | 95 <sup>-</sup>               | lan Meier<br>% UTL95%  | (KM) Backo<br>Mean<br>% Coverage<br>ercentile (z)  | ground Sta<br>1.431<br>3.329<br>2.647   |   |  |  | 95% K<br>95% KM Per  | M UPL (t)  | 3.027<br>2.992   |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39   |  |  | 95<br>9<br>9                  | l <b>an Meier</b><br>% UTL95%<br>90% KM Pe   | (KM) Backo<br>Mean<br>% Coverage<br>ercentile (z)  | 9round Sta<br>1.431<br>3.329<br>2.647<br>3.638  | tistics Ass   | suming No  | rmal Dist  | 95% K<br>95% KM Per<br>95%   | M UPL (t)  | 3.027<br>2.992   |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40   |  |  | 95<br>9<br>9                  | l <b>an Meier</b><br>% UTL95%<br>90% KM Pe   | (KM) Back<br>Mean<br>6 Coverage<br>ercentile (z)<br>ercentile (z)  | ground Sta<br>1.431<br>3.329<br>2.647<br>3.638  | tistics Ass   | suming No  | rmal Dist  | 95% K<br>95% KM Per<br>95%   | M UPL (t)  | 3.027<br>2.992   |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40   |  |  | 95'<br>9<br>9<br>9<br>9<br>DL | lan Meier % UTL95% 00% KM Pe 09% KM Pe   | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z)   | ground Sta<br>1.431<br>3.329<br>2.647<br>3.638<br>round Stati<br>1.434  | tistics Ass   | suming No  | rmal Dist  | 95% K<br>95% KM Per<br>95%<br>ibution  | CM UPL (t)<br>rcentile (z)<br>6 KM USL   | 3.027<br>2.992<br>4.331  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42   |  |  | 95'<br>9<br>9<br>9<br>9<br>DL | lan Meier  % UTL95%  00% KM Pe  99% KM Pe  /2 Substitu  % UTL95%   | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z) ution Backg   | ground Stat<br>1.431<br>3.329<br>2.647<br>3.638<br>round Stati<br>1.434<br>3.318  | tistics Ass   | suming No  | rmal Dist  | 95% K<br>95% KM Per<br>95%<br>ibution  | CM UPL (t)<br>recentile (z)<br>6 KM USL  | 3.027<br>2.992<br>4.331<br>0.942   |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43   |  |  | 95'<br>9<br>9<br>9<br>9<br>DL | Meier  W UTL95%  W W Pe  W W Pe  W W W Pe  W W W Pe  W W W W W W W W W W W W W W W W W W W   | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z) ution Backg Mean 6 Coverage   | ground Sta<br>1.431<br>3.329<br>2.647<br>3.638<br>round Stati<br>1.434<br>3.318<br>2.641  | tistics Ass   | suming No  | rmal Dist  | 95% K<br>95% KM Per<br>95%<br>ibution<br>95<br>95% Per   | M UPL (t) reentile (z) KM USL SD W UPL (t)   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44   |  | DL   | 95<br>9<br>9<br>DL            | % UTL95%<br>90% KM Pe<br>99% KM Pe<br>72 Substitu<br>% UTL95%<br>90% Pe  | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z) Mean 6 Coverage ercentile (z) ercentile (z)   | ground Sta<br>1.431<br>3.329<br>2.647<br>3.638<br>round Stati<br>1.434<br>3.318<br>2.641<br>3.625   | tistics Ass   | suming No  | rmal Distr   | 95% K<br>95% KM Per<br>95%<br>ibution<br>95<br>95% Per   | SD SD WPL (t) centile (z) 6 KM USL SD SD SW UPL (t) centile (z) 95% USL  | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984   |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45   |  | DL   | 95<br>9<br>9<br>DL            | % UTL95%<br>90% KM Pe<br>99% KM Pe<br>72 Substitu<br>% UTL95%<br>90% Pe  | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z) Mean 6 Coverage ercentile (z) ercentile (z)   | ground Sta<br>1.431<br>3.329<br>2.647<br>3.638<br>round Stati<br>1.434<br>3.318<br>2.641<br>3.625   | tistics Ass   | suming No  | rmal Distr   | 95% K<br>95% KM Per<br>95%<br>ibution<br>95<br>95% Per   | SD SD WPL (t) centile (z) 6 KM USL SD SD SW UPL (t) centile (z) 95% USL  | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984   |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46   |  | DL   | 95<br>9<br>9<br>DL            | lan Meier % UTL95% 90% KM Pe 99% KM Pe /2 Substitu % UTL95% 90% Pe 99% Pe recommer   | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z) Mean 6 Coverage ercentile (z) ercentile (z)   | ground Stat  1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro   | stics Assu  | uming Nor  | rmal Distri  | 95% K<br>95% KM Per<br>95%<br>ibution<br>95<br>95% Per   | SD SD WPL (t) centile (z) 6 KM USL SD SD SW UPL (t) centile (z) 95% USL  | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984   |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46   |  | DL   | 95<br>9<br>9<br>DL            | lan Meier % UTL95% 00% KM Pe 99% KM Pe /2 Substitu % UTL95% 90% Pe 99% Pe recommer   | Mean 6 Coverage ercentile (z) ercentile (z) Mean 6 Coverage ercentile (z) ercentile (z) ercentile (z) mean 6 Coverage ercentile (z) ercentile (z) ercentile (z)  | ground Stat  1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro   | stics Assu  | uming Nor  | mal Distri   | 95% K 95% KM Per 95% ibution 95 95% Per  | SD W UPL (t) centile (z) 6 KM USL SD W UPL (t) centile (z) 95% USL ons   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984   |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48   |  | DL   | 95<br>9<br>DL<br>95           | lan Meier  % UTL95%  00% KM Pe  99% KM Pe  /2 Substitu  % UTL95%  90% Pe  99% Pe  recommer  Gan  A-D To  | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z) wition Backg Mean 6 Coverage ercentile (z) ercentile (z) ercentile (z)  | 7 ground Stat<br>1.431<br>3.329<br>2.647<br>3.638<br>7 cound Stati<br>1.434<br>3.318<br>2.641<br>3.625<br>d. DL/2 pro   | stics Assi  | uming Nor  | mal Distri   | 95% K<br>95% KM Per<br>95%<br>ibution<br>95<br>95% Per   | SD SD SS USL Ons   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49   |  | DL   | 95<br>9<br>DL<br>95           | ## UTL95% ## UTL95% ## Pe ## P | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z) wition Backg Mean 6 Coverage ercentile (z)  | round State  1.431 3.329 2.647 3.638  round State 1.434 3.318 2.641 3.625 d. DL/2 pro  1.403 0.755  | stics Assi  | comparison  Servation  An  Not Gamr  | mal Distri   | 95% K 95% KM Per 95% ibution  95 95% Per nistorical rease Darling GOF T outed at 5% Si   | SD SD WHL (t) centile (z) 6 KM USL SD SD SW UPL (t) centile (z) 95% USL ONS  | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50   |  | DL   | 95° CDL 95°                   | Section   Section  | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z) witton Backg Mean 6 Coverage ercentile (z)  | round Stat  1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  1.403 0.755 0.168   | stics Assu<br>ovided for<br>Data  | comparison  Not Gamri  | mal Distri   | 95% KM Per 95% ibution  95 95% Per sistorical reasonated at 5% Sign-smirnoff GC  | SD SD SW UPL (t) Centile (z) KM USL SD SD SW UPL (t) Centile (z) 95% USL Ons  Fest gnificance DF   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51   |  | DL   | 95° CDL 95°                   | S   C   C   C   C   C   C   C   C   C  | (KM) Backg Mean 6 Coverage ercentile (z) ercentile (z) wition Backg Mean 6 Coverage ercentile (z) ertentile (z) ercentile (z)  | round Stat  1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  1.403 0.755 0.168 0.133   | stics Assurated or Data   | comparison  Servation  An  Not Gamr  Not Gamr  | mal Distributions and has Only derson-Distributions and Distributions of the Distribution of the Distribut | 95% K 95% KM Per 95% ibution  95 95% Per historical rease Darling GOF T outed at 5% Si   | SD SD SW UPL (t) Centile (z) KM USL SD SD SW UPL (t) Centile (z) 95% USL Ons  Fest gnificance DF   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52   |  | DL   | 95° CDL 95°                   | S   C   C   C   C   C   C   C   C   C  | Mean 6 Coverage ercentile (z) ercentile (z) witton Backg Mean 6 Coverage ercentile (z)   | round Stat  1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  1.403 0.755 0.168 0.133   | stics Assurated or Data   | comparison  Servation  An  Not Gamr  Not Gamr  | mal Distributions and has Only derson-Distributions and Distributions of the Distribution of the Distribut | 95% KM Per 95% ibution  95 95% Per sistorical reasonated at 5% Sign-smirnoff GC  | SD SD SW UPL (t) Centile (z) KM USL SD SD SW UPL (t) Centile (z) 95% USL Ons  Fest gnificance DF   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52<br>53   |  | DL   | 95° CDL 95°                   | S   C   C   C   C   C   C   C   C   C  | (KM) Backy Mean 6 Coverage ercentile (z) ercentile (z) wition Backy Mean 6 Coverage ercentile (z)  | round Stati 1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  rests on De 1.403 0.755 0.168 0.133 a Distribute  | stics Assistics Assistance and Assistance | comparison bservation An Not Gamm K Not Gamm Significance  | mal Distribution on Sand has Only derson-Ena Distribution on D | 95% KM Per 95% ibution  95 95% Per sistorical reasonated at 5% Sign-smirnoff GC  | SD SD SW UPL (t) Centile (z) KM USL SD SD SW UPL (t) Centile (z) 95% USL Ons  Fest gnificance DF   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52<br>53<br>54                                     |  | DL   | 95° CDL 95°                   | Solution   Solution  | (KM) Backy Mean 6 Coverage ercentile (z) ercentile (z) wition Backy Mean 6 Coverage ercentile (z)  | round Stati 1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  [ests on De 1.403 0.755 0.168 0.133 a Distribute  | stics Assistics Assistance and Assistance | comparison bservation An Not Gamm K Not Gamm Significance  | mal Distribution on Sand has Only derson-Ena Distribution on D | 95% K 95% KM Per 95% ibution  95 95% Per nistorical reas Darling GOF T outed at 5% Signatured at 5% Signatur | SD SD WHE (t) Centile (z) When the tentile (z) SD SW UPL (t) Centile (z) SSW USL ONS  Fest Sprificance  OF Sprificance   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313  |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52<br>53<br>54<br>55                               |  | DL   | 95° CDL 95°                   | S   S   S   S   S   S   S   S   S   S  | (KM) Backy Mean 6 Coverage ercentile (z) erc | round Stati 1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  1.403 0.755 0.168 0.133 a Distribute  Statistics or 3.351   | stics Assistics Assistance and Assistance | comparison bservation An Not Gamm K Not Gamm Significance  | mal Distribusions and his Only derson-Distribusions Distribusions Distri | 95% KM Per 95% ibution  95 95% Per 95% | SD (% UPL (t) centile (z) % KM USL (some series (z) 95% USL centile (z) 95% USL centile (z) 95% USL centile (z) gnificance centile (z) gn | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313<br>Level                                     |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52<br>53<br>54<br>55<br>56                         |  | DL   | 95° CDL 95°                   | San Meier  | Mean 6 Coverage ercentile (z)  | round Stat  1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  1.403 0.755 0.168 0.133 a Distribute  statistics or 3.351 0.553   | stics Assistics Assistance and Assistance | comparison bservation An Not Gamm K Not Gamm Significance  | mal Distribusions and has Only derson-Distribusion Distribusion Distri | 95% KM Per 95% KM Per 95% ibution  95 95% Per  | SD SD SW UPL (t) Centile (z) KM USL SD SW UPL (t) Centile (z) 95% USL Ons  Fest gnificance DF gnificance   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313<br>Level<br>Level                            |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>46<br>47<br>48<br>49<br>50<br>51<br>52<br>53<br>54<br>55<br>56<br>57                               |  | DL   | 95° DL 95°                    | San Meier  | Mean 6 Coverage ercentile (z)  | round Stat  1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  1.403 0.755 0.168 0.133 a Distribute  Statistics or 3.351 0.553 301.6   | stics Assistics Assistance and Assistance | comparison bservation An Not Gamm K Not Gamm Significance  | mal Distribusions and has Only derson-Distribusion Distribusion Distri | 95% KM Per 95% ibution  95 95% Per 95% | SD SD SW UPL (t) Centile (z) KM USL SD SW UPL (t) Centile (z) 95% USL Ons  Fest gnificance DF gnificance   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313<br>Level                                     |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52<br>53<br>54<br>55<br>56<br>57<br>58             |  | DL   | 95° DL 95° /2 is not a        | Second   S   | (KM) Backy Mean 6 Coverage ercentile (z) erc | round Stat  1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  ests on De 1.403 0.755 0.168 0.133 a Distribute  statistics or 3.351 0.553 301.6 1.852                            | stics Assistics Assistance and Assistance | comparison  Servation  An  Not Gamm  Not Gamm  Significance  | mal Distribusions and his Only derson-Distribusion Distribusion Distribusion Level   | 95% KM Per 95% ibution  95 95% Per 95% | SD SD SW UPL (t) centile (z) 6 KM USL SD SW UPL (t) centile (z) 95% USL ST   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313<br>Level<br>Level<br>3.143<br>0.589<br>282.9 |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52<br>53<br>54<br>55<br>56<br>57<br>58<br>59       |  | DL   | 95° DL 95° /2 is not a        | Second   S   | Mean 6 Coverage ercentile (z)  | round Stat  1.431 3.329 2.647 3.638  round Stati 1.434 3.318 2.641 3.625 d. DL/2 pro  ests on De 1.403 0.755 0.168 0.133 a Distribute  statistics or 3.351 0.553 301.6 1.852                            | stics Assistics Assistance and Assistance | comparison  Servation  An  Not Gamm  Not Gamm  Significance  | mal Distribusions and his Only derson-Distribusion Distribusion Distribusion Level   | 95% KM Per 95% KM Per 95% ibution  95 95% Per  | SD SD SW UPL (t) centile (z) 6 KM USL SD SW UPL (t) centile (z) 95% USL ST   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313<br>Level<br>Level                            |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52<br>53<br>54<br>55<br>56<br>57<br>58<br>59<br>60 |  | DL   | 95° DL 95° /2 is not a        | Section   Sect   | (KM) Backg Mean 6 Coverage ercentile (z) erc | round Stati  1.431  3.329  2.647  3.638  round Stati  1.434  3.318  2.641  3.625  d. DL/2 pro   rests on De  1.403  0.755  0.168  0.133  a Distribute  statistics or  3.351  0.553  301.6  1.852  1.045 | stics Assistics | comparisons of the comparison of the c | mal Distribusions and his Only derson-Distribusion Distribusion Distri | 95% KM Per 95% ibution  95 95% Per 95% | SD SD SW UPL (t) centile (z) 6 KM USL SD SW UPL (t) centile (z) 95% USL ST   | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313<br>Level<br>Level<br>3.143<br>0.589<br>282.9 |  |  |  |
| 32<br>33<br>34<br>35<br>36<br>37<br>38<br>39<br>40<br>41<br>42<br>43<br>44<br>45<br>46<br>47<br>48<br>49<br>50<br>51<br>52<br>53<br>54<br>55<br>56<br>57<br>58<br>59       |  |  | 95' DL 95' /2 is not a        | Section   Sect   | (KM) Backg Mean 6 Coverage ercentile (z) erc | round Stati  1.431  3.329  2.647  3.638  round Stati  1.434  3.318  2.641  3.625  d. DL/2 pro  1.403  0.755  0.168  0.133  a Distribute  Statistics or  3.351  0.553  301.6  1.852  1.045               | stics Assistics | comparison  comparison  Servation  An  Not Gamm  K  Not Gamm  Significance  I Data Onl   | mal Distribution on Sand has Only derson-Distribution Distribution Dis | 95% KM Per 95% ibution  95 95% Per 95% | SD (% UPL (t) centile (z) % KM USL (t) centile (z) 95% USL (ons (centile (z) 95% USL (centile | 3.027<br>2.992<br>4.331<br>0.942<br>3.018<br>2.984<br>4.313<br>Level<br>Level<br>3.143<br>0.589<br>282.9 |  |  |  |

|            | Α  | В         | С            | D             | Е            | F   | G                                | Н           | I                      | J             | K              | L      |  |
|------------|--|-----------|--------------|---------------|--------------|---|----------------------------------|-------------|------------------------|---------------|----------------|--------|--|
| 63         |  |           |              | S may not     |              |   |                                  |             |                        |               |                |        |  |
| 64         |  |           |              | situations,   |              |   |                                  |             |                        |               |                |        |  |
| 65         | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates  |           |              |               |              |   |                                  |             |                        |               | nates<br>1.511 |        |  |
| 66         |  |           |              |               | Minimum      | 0.2   | Mean<br>Median                   |             |                        |               |                |        |  |
| 67         |  |           |              |               | Maximum      | 3.41  |                                  | 1.164       |                        |               |                |        |  |
| 68         |  |           |              |               | SD           | 0.871   |                                  | 0.577       |                        |               |                |        |  |
| 69         |  |           |              |               | hat (MLE)    | 2.674   |                                  | 2.561       |                        |               |                |        |  |
| 70         |  |           |              |               | hat (MLE)    | 0.565   |                                  | 0.59        |                        |               |                |        |  |
| 71         |  |           | NAL E N      |               | hat (MLE)    | 347.6   |                                  |             |                        | u star (bias  | ,              | 332.9  |  |
| 72         |  |           |              |               |              |   |                                  |             |                        |               | 0.944<br>2.775 |        |  |
| 73         |  |           | 55% Percer   |               | Percentile   | 3.32  | 90% Percentile<br>99% Percentile |             |                        |               |                | 4.512  |  |
| 74         |  |           | The followi  |               | a Gamma      | 4.312   |                                  |             |                        |               |                |        |  |
| 75         |  |           |              | Limits usir   |              |   | -                                |             |                        | -             | -              |        |  |
| 76<br>77   |  |           | Оррсі        | Lilling usii  | WH           | HW  | ii) ana ma                       | WKIIIS WIXI | <b>Cy</b> (1111) II    | iicu ious     | WH             | HW     |  |
| 78         | Approx. G  | amma UT   | L with 95%   | Coverage      | 3.88         | 4.042   |                                  | 95%         | Approx. G              | amma UPL      | 3.351          | 3.446  |  |
| 79         |  |           |              | ımma USL      | 6.031        | 6.584   |                                  |             | <b>P P</b> · · · · · · |               |                |        |  |
| 80         |  |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 81         | The following statistics are computed using gamma distribution and KM estimates  |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 82         |  |           |              | Limits usir   |              | -   |                                  |             |                        |               |                |        |  |
| 83         |  |           |              | I             | k hat (KM)   | 2.278   |                                  |             |                        | n             | u hat (KM)     | 296.1  |  |
| 84         |  |           |              |               | WH           | HW  |                                  |             |                        |               | WH             | HW     |  |
| 85         | Approx. G  | amma UT   | L with 95%   | Coverage      | 4.328        | 4.621   |                                  | 95%         | Approx. G              | amma UPL      | 3.641          | 3.813  |  |
| 86         |  |           | 95% Ga       | ımma USL      | 7.22         | 8.245   |                                  |             |                        |               |                |        |  |
| 87         |  |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 88         |  |           |              |               |              | Test on D   | etected O                        | bservation  |                        | ilk GOF Te:   |                |        |  |
| 89         |  |           |              | iro Wilk Te   |              | 0.846   |                                  |             |                        |               |                |        |  |
| 90         |  |           | -            | iro Wilk Cri  |              | 0.945   |                                  | el          |                        |               |                |        |  |
| 91         |  |           |              | illiefors Te  |              | 0.182   |                                  |             |                        | GOF Test      |                |        |  |
| 92         |  |           | 5% L         | illiefors Cri |              | 0.132   |                                  |             |                        | nt 5% Signifi | cance Leve     | el     |  |
| 93         |  |           |              | Di            | ata Not Lo   | gnormal at  | 5% Signit                        | icance Lev  | /el                    |               |                |        |  |
| 94         |  | Dookara   | und Lama     | mal DOC       | Ctatiatics / | \aaumina l  |                                  | Dietributie | n I laina li           | mputed Nor    | Detecto        |        |  |
| 95         |  | Баскуго   | _            | lean in Orig  |              | 1.465   | _ognormai                        | Distributio | on Using II            |               | Log Scale      | 0.149  |  |
| 96         |  |           | IV           | _             | inal Scale   | 0.911   |                                  |             |                        |               | Log Scale      | 0.733  |  |
| 97<br>98   |  |           | 959          |               |              | 5.026   |                                  | 3.029       |                        |               |                |        |  |
| 99         | 95% UTL95% Coverage<br>95% Bootstrap (%) UTL95% Coverage   |           |              |               |              | 3.043   |                                  | 3.98        |                        |               |                |        |  |
| 100        | 200/ 5   |           |              |               | 2.969        |   | 3.874                            |             |                        |               |                |        |  |
| 101        | 2001 5 ( )   |           |              |               |              | 6.383   |                                  | 10.9        |                        |               |                |        |  |
| 102        |  |           |              |               | , ,          |   |                                  |             |                        |               |                |        |  |
| 103        | Background DL/2 Statistics Assuming Lognormal Distribution   |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 104        |  |           |              |               |              |   |                                  |             |                        | Mean in       | Log Scale      | 0.0811 |  |
| 105        |  |           |              |               | 0.942        | SD in Log Scale   |                                  |             |                        |               |                |        |  |
| 106        |  |           |              |               | 5.622        | 95% UPL (t)   |                                  |             |                        |               |                |        |  |
| 107        |  |           |              |               | centile (z)  | 3.113   | 95% Percentile (z) 4.            |             |                        |               |                |        |  |
| 108        | 99% Percentile (z) 7.353 95% USL 13.4  DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.   |           |              |               |              |   |                                  |             |                        |               | 13.41          |        |  |
| 109        |  | DL/2      | 2 is not a R | ecommen       | ded Metho    | a. DL/2 pro   | ovided for                       | compariso   | ns and his             | storical reas | sons.          |        |  |
| 110        |  |           |              | N1 -          |              | datult  | Face Post                        |             | -41-41-                |               |                |        |  |
| 111        |  |           | B            |               |              |   |                                  | ground St   |                        | Lav-1         |                |        |  |
| 112        |  |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 113        |  |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 114        | Nonparametric Uppper Limits for BTVs(no distinction made between detects and nondetects)  Order of Statistic, r 64 95% UTL with95% Coverage 3.043  |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 115        |  |           |              |               | roximate f   | 1.684   | Co                               | nfidence C  |                        |               | _              | 0.842  |  |
| 116<br>117 |  |           |              |               | 2.961        | Confidence Coefficient (CC) achieved by UTL 0.84 95% USL 3.41 |                                  |             |                        |               |                |        |  |
| 118        |  |           |              |               |              | 5.598   |                                  |             |                        |               |                |        |  |
| 119        |  |           |              |               |              |   | <u> </u>                         |             |                        |               |                |        |  |
| 120        |  | Note: The | use of USI   | L to estimat  | te a BTV is  | recommer  | nded only v                      | when the da | ata set rep            | resents a b   | ackground      |        |  |
| 121        | Note: The use of USL to estimate a BTV is recommended only when the data set represents a background data set free of outliers and consists of observations collected from clean unimpacted locations. |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 122        | The use of USL tends to provide a balance between false positives and false negatives provided the data  |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 123        | represents a background data set and when many onsite observations need to be compared with the BTV.   |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| 124        |  |           |              |               |              |   |                                  |             |                        |               |                |        |  |
| ئت         |  |           |              |               |              |   |                                  |             |                        |               |                |        |  |